# MONTANA'S 2007 Annual Public Water System Compliance Report

The Drinking Water Program: An Overview

The EPA established the Public Water System Supervision (PWSS) Program under the authority of the 1974 Safe Drinking Water Act (SDWA). Under the SDWA and the 1986 Amendments, EPA sets national limits on contaminant levels in drinking water to ensure that the water is safe for human consumption. These limits are known as Maximum Contaminant Levels (MCLs) and the Maximum Residual Disinfectant Levels (MRDLs). For some regulations, EPA establishes treatment techniques in lieu of an MCL to control unacceptable levels of contaminants in water. The Agency also regulates how often public water systems (PWSs) monitor their water for contaminants and report the monitoring results to the states or EPA. Generally, the larger the population served by a water system, the more frequent the monitoring and reporting (M/R) requirements. In addition, EPA requires PWSs to monitor for unregulated contaminants to provide data for future regulatory development. Finally, EPA requires PWSs to notify their consumers when they have violated these regulations. The 1996 Amendments to the SDWA require consumer notification to include a clear and understandable explanation of the nature of the violation, its potential adverse health effects, steps that the PWS is undertaking to correct the violation and the possibility of alternative water supplies during the violation.

The SDWA applies to the 50 states, the District of Columbia, Indian Lands, Puerto Rico, the Virgin Islands, American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands.

The SDWA allows states and territories to seek EPA approval to administer their own PWSS Programs. The authority to run a PWSS Program is called primacy. For a state to receive primacy, EPA must determine that the state meets certain requirements laid out in the SDWA and the regulations, including the adoption of drinking water regulations that are at least as stringent as the Federal regulations and a demonstration that they can enforce the program requirements. Of the 56 states and territories, all but Wyoming and the District of Columbia have primacy. The EPA Regional Offices administer the PWSS Programs within these two jurisdictions.

The 1986 SDWA Amendments gave Indian Tribes the right to apply for and receive primacy. EPA currently administers PWSS Programs on all Indian lands except the Navaho Nation, which was granted primacy in late 2000.

#### **Annual State PWS Report**

Each quarter, primacy states submit data to the Safe Drinking Water Information System (SDWIS/FED), an automated database maintained by EPA. The data submitted include, but are not limited to, PWS inventory information, the incidence of Maximum Contaminant Level, Maximum Residual Disinfectant Level, monitoring, and treatment technique violations; and information on enforcement activity related to these violations. Section 1414(c)(3) of the Safe Drinking Water Act requires states to provide EPA with an annual report of violations of the primary drinking water standards. This report provides the numbers of violations in each of six categories: MCLs, MRDLs, treatment techniques, variances and exemptions, significant monitoring violations, and significant consumer notification violations. The EPA Regional Offices report the information for Wyoming, the District of Columbia, and all Indian Lands but the Navaho Nation. EPA Regional offices also report Federal enforcement actions taken. Data retrieved from SDWIS/FED form the basis of this report.

#### **Public Water System**

A "Public water supply system" means a system for the provision of water for human consumption from a community well, water hauler for cisterns, water bottling plant, water dispenser, or other water supply that has at least 15 service connections or that regularly serves at least 25 persons daily for any 60 or more days in a calendar year. There are three types of PWSs. PWSs can be community (such as towns), nontransient noncommunity (such as schools or factories), or transient noncommunity systems (such as rest stops or parks). For this report when the acronym APWS≅ is used, it means systems of all types unless specified in greater detail.

#### **Maximum Contaminant Level**

Under the Safe Drinking Water Act (SDWA), the EPA sets national limits on contaminant levels in drinking water to ensure that the water is safe for human consumption. These limits are known as Maximum Contaminant Levels (MCLs).

#### **Maximum Residual Disinfectant Level**

The EPA sets national limits on residual disinfectant levels in drinking water to reduce the risk of exposure to disinfectant byproducts formed, when public water systems add chemical disinfectant for either primary or residual treatment. These limits are known as Maximum Residual Disinfectant Levels (MRDLs).

#### **Treatment Techniques**

For some regulations, the EPA establishes treatment techniques (TTs) in lieu of an MCL to control unacceptable levels of certain contaminants. For example, treatment techniques have been established for viruses, some bacteria, and turbidity.

#### **Monitoring**

A PWS is required to monitor and verify that the levels of contaminants present in the water do not exceed the MCL. If a PWS fails to have its water tested as required or fails to report test results correctly to the primacy agent, a monitoring violation occurs.

#### **Significant Monitoring Violations**

For this report, significant monitoring violations are generally defined as any Significant monitoring violation that occurred during the calendar year of the report. A Significant monitoring violation, with rare exceptions, occurs when no samples were taken or no results were reported during a compliance period.

#### **Consumer Notification**

Every Community Water System is required to deliver to its customers a brief annual water quality report. This report is to include some educational material, and will provide information on the source water, the levels of any detected contaminants, and compliance with drinking water regulations.

For this report, a significant public notification violation occurred if a community water system completely failed to provide its customers with the required annual water quality report (Consumer Confidence Report).

#### OBTAINING A COPY OF THE 2007 PUBLIC WATER SYSTEMS REPORT

As required by the Safe Drinking Water Act, the State of Montana has made the 2007 Public Water Systems report available to the public. Interested individuals can obtain a copy of the 2007 Annual Public Water Systems Report for Montana by accessing:

State Website: http://www.deq.mt.gov/wqinfo/pws/index.asp

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#### **Description of Report**

The attached report is broken down by rule into two types of violations, MCL (maximum contaminant level) and monitoring. Each violation type lists three categories, "# of Violations", "# of RTC Violations", and "# of PWS in Violation". The following is a description of each:

# of Violations, this describes the total number of violations created for each regulated contaminant. Since violations are associated with sample point locations, it is possible for one system to have more than one violation for the same contaminant.

# of RTC Violations, RTC (return to compliance) violations are violations that were created, but that have since been returned to compliance.

# of PWS in Violation, this indicates the number of systems that are responsible for the total number of violations listed for each rule. Thus, there may be more total violations than total systems.





#### Report Selection Criteria

EPA Region: ALL

Primacy Agency: MT

Water System ID: ALL

Principal County: ALL

Water System Status: ACTIVE, CLOSED

Water System Type: ALL

Owner Type: ALL

Population Served: ALL

Service Connections: ALL

Compliance Period: BETWEEN 1/1/2007 and 12/31/2007

Violation Codes: ALL

Contaminant Codes: ALL

Action Dates: ALL

Issuing Agency: ALL

Action Severity: ALL

Action Codes: ALL

Summary AC Report? Yes

Details by PWS ID? No

**Current Quarterly Freeze** 

Data Last Updated: 04/02/2008

PWS Matching Criteria: 1,047





	REGION: 08			AC Chem	PRIMACY AGENCY: MT			
Inorga	anic Contaminants (IOC)							
				MCLs			Monitoring	
Contar	minant		# of	# of RTC	# of PWS	# of	# of RTC	# of PWS
Code	Name	MCL (mg/l)	Violations	Violations	in Violation	Violations	Violations	in Violation
1005	Arsenic	0.01000	10	0	5	24	5	22
1010	Barium	2.00000	0	0	0	18	0	18
1015	Cadmium	0.00500	0	0	0	18	0	18
1020	Chromium	0.10000	0	0	0	18	0	18
1025	Fluoride	4.00000	4	1	2	23	3	22
1035	Mercury	0.00200	0	0	0	18	0	18
1036	Nickel	0.00000	0	0	0	22	0	22
1038	Nitrate-Nitrite	10.00000	25	9	14	131	26	115
1045	Selenium	0.05000	0	0	0	18	0	18
1074	Antimony, Total	0.00600	0	0	0	22	0	22
1075	Beryllium, Total	0.00400	0	0	0	22	0	22
1085	Thallium, Total	0.00200	0	0	0	23	0	23
IOC To	otals:	•	39	10	21	357	34	145





EPA F	REGION: 08		AC Chem			PRIMACY AGENCY: MT			
Radio	nuclides Contaminants (RAD)								
				MCLs		Monitoring			
Contaminant			# of	# of RTC	# of PWS	# of	# of RTC	# of PWS	
Code	Name	MCL (mg/l)	Violations	Violations	in Violation	Violations	Violations	in Violation	
4000	Gross Alpha, Excl. Radon & U	15.00000	0	0	0	35	0	14	
4006	Combined Uranium	30.00000	5	0	2	0	0	0	
4010	Combined Radium (-226 & -228)	5.00000	0	0	0	34	0	13	
RAD T	otals:	5	0	2	69	0	15		





	REGION: 08			AC Chem		PRIMACY AGENCY: MT			
Synth	etic Organic Contaminants (S	SOC)							
				MCLs			Monitoring		
Contar	minant		# of	# of RTC	# of PWS	# of	# of RTC	# of PWS	
Code	Name	MCL (mg/l)	Violations	Violations	in Violation	Violations	Violations	in Violation	
2005	Endrin	0.00200	0	0	0	19	0	18	
2010	gamma-BHC; Lindane	0.00020	0	0	0	19	0	18	
2015	Methoxychlor	0.04000	0	0	0	19	0	18	
2020	Toxaphene	0.00300	0	0	0	19	0	18	
2031	Dalapon	0.20000	0	0	0	29	1	27	
2035	Di(2-ethylhexyl) adipate	0.40000	0	0	0	19	0	18	
2036	Oxamyl; Vydate	0.20000	0	0	0	22	0	21	
2037	Simazine	0.00400	0	0	0	19	0	18	
2039	Di(2-ethylhexyl) phthalate	0.00600	0	0	0	25	8	23	
2040	Picloram	0.50000	0	0	0	28	0	26	
2041	Dinoseb	0.00700	0	0	0	28	0	26	
2042	Hexachlorocyclopentadiene	0.05000	0	0	0	20	1	19	
2043	Aldicarb sulfoxide	0.00400	0	0	0	22	0	21	
2044	Aldicarb sulfone	0.00200	0	0	0	22	0	21	
2046	Carbofuran	0.04000	0	0	0	22	0	21	
2047	Aldicarb	0.00300	0	0	0	22	0	21	
2050	Atrazine	0.00300	0	0	0	19	0	18	
2051	Alachlor; Lasso	0.00200	0	0	0	19	0	18	
2065	Heptachlor	0.00040	0	0	0	19	0	18	
2067	Heptachlor epoxide	0.00020	0	0	0	19	0	18	
2105	2,4-D	0.07000	0	0	0	29	0	27	





	REGION: 08			AC Chem		PRI MACY AGENCY: MT			
Synth	etic Organic Contaminants (S	OC)							
				MCLs		Monitoring			
Contar	Contaminant		# of	# of RTC	# of PWS	# of	# of RTC	# of PWS	
Code	Name	MCL (mg/l)	Violations	Violations	in Violation	Violations	Violations	in Violation	
2110	2,4,5-TP; Silvex	0.05000	0	0	0	28	0	26	
2274	Hexachlorobenzene; HCB	0.00100	0	0	0	19	0	18	
2306	Benzo(a)pyrene	0.00020	0	0	0	19	0	18	
2326	Pentachlorophenol	0.00100	0	0	0	28	0	26	
2959	Chlordane	0.00200	0	0	0	19	0	18	
SOC T	SOC Totals:			0	0	572	10	39	





REGION: 08			AC Chem			PRIMACY	' AGENCY: M
le Organic Contaminants (VOC)							
			MCLs			Monitoring	
minant		# of	# of RTC	# of PWS	# of	# of RTC	# of PWS
Name	MCL (mg/l)	Violations	Violations	in Violation	Violations	Violations	in Violation
1,2,4-Trichlorobenzene	0.07000	0	0	0	17	1	17
cis-1,2-Dichloroethylene	0.07000	0	0	0	17	1	17
Xylenes, Total	10.00000	0	0	0	17	1	17
Dichloromethane; methylene chloride	0.00500	0	0	0	17	1	17
o-Dichlorobenzene	0.60000	0	0	0	17	1	17
p-Dichlorobenzene	0.07500	0	0	0	17	1	17
Vinyl chloride	0.00200	0	0	0	17	1	17
1,1-Dichloroethylene	0.00700	0	0	0	17	1	17
trans-1,2-Dichloroethylene	0.10000	0	0	0	17	1	17
1,2-Dichloroethane	0.00500	0	0	0	17	1	17
1,1,1-Trichloroethane	0.20000	0	0	0	17	1	17
Carbon tetrachloride	0.00500	0	0	0	17	1	17
1,2-Dichloropropane	0.00500	0	0	0	17	1	17
Trichloroethylene	0.00500	0	0	0	17	1	17
1,1,2-Trichloroethane	0.00500	0	0	0	17	1	17
Tetrachloroethylene	0.00500	0	0	0	17	1	17
Monochlorobenzene; Chlorobenzene	0.10000	0	0	0	17	1	17
Benzene	0.00500	0	0	0	17	1	17
Toluene	1.00000	0	0	0	17	1	17
Ethylbenzene	0.70000	0	0	0	17	1	17
Styrene	0.10000	0	0	0	17		17
	REGION: 08  Ile Organic Contaminants (VOC)  minant Name  1,2,4-Trichlorobenzene cis-1,2-Dichloroethylene Xylenes, Total Dichloromethane; methylene chloride o-Dichlorobenzene p-Dichlorobenzene Vinyl chloride 1,1-Dichloroethylene trans-1,2-Dichloroethylene 1,2-Dichloroethane 1,1,1-Trichloroethane Carbon tetrachloride 1,2-Dichloropropane Trichloroethylene 1,1,2-Trichloroethane Tetrachloroethylene Monochlorobenzene; Chlorobenzene Benzene Toluene Ethylbenzene	In Organic Contaminants (VOC)   In Organic Contaminants (VOC	Minant	AC Chem   Ite Organic Contaminants (VOC)   MCLs   MCLs	MCL   MCL	Name	AC Chem





EPA REGION: 08		AC Chem			PRIMACY	' AGENCY: MT
VOC Totals:	0	0	0	357	21	17





EPA REG	ION: 08	AC Rule		PRIMACY	AGENCY: MT
Consumer	r Confidence Report (CCR)				
			# of	# of RTC	# of PWS
Violation T	ype Violation Name		Violations	Violations	in Violation
71	CCR Complete Failure to Report		157	95	123





EPA REC	GION: 08	AC Rule		PRIMACY	AGENCY: MT
Disinfect	tion Byproducts Rule (DBP)				
			# of	# of RTC	# of PWS
Violation <sup>-</sup>	Type Violation Name		Violations	Violations	in Violation
2	MCL, Average		18	4	7
27	Monitoring and Reporting Stage 1		34	4	12

	MCLs			Monitoring			Treatment Technique		
	# of	# of RTC	# of PWS	# of	# of RTC	# of PWS	# of	# of RTC	# of PWS
	Violations	Violations	in Violation	Violations	Violations	in Violation	Violations	Violations	in Violation
<b>DBP Totals</b>	18	4	7	34	4	12	0	0	0





EPA REGIOI	N: 08	AC Rule		PRIMACY	AGENCY: MT
Lead and Cop	oper Rule (LCR)				
			# of	# of RTC	# of PWS
Violation Type	· Violation Name		Violations	Violations	in Violation
51	Initial Tap Sampling for Pb and Cu		157	93	54
52	Follow-up and Routine Tap Sampling		415	13	329
65	Public Education		12	6	12

	MCLs			Monitoring			Treatment Technique		
	# of	# of RTC	# of PWS	# of	# of RTC	# of PWS	# of	# of RTC	# of PWS
	Violations	Violations	in Violation	Violations	Violations	in Violation	Violations	Violations	in Violation
LCR Totals				572	106	382	12	6	12





EPA REGION: 08	AC Rule		PRIMACY	AGENCY: MT
Public Notice (PN)				
		# of	# of RTC	# of PWS
Violation Type Violation Name		Violations	Violations	in Violation
		0	0	0





EPA REGION: 08	AC Rule		PRIMACY	AGENCY: MT
Surface Water Treatment Rule (SWTR)				
		# of	# of RTC	# of PWS
Violation Type Violation Name		Violations	Violations	in Violation

		MCLs			Monitoring		Treatment Technique			
	# of # of RTC # of PWS		# of	# of # of RTC # of		# of	# of RTC	# of PWS		
	Violations	Violations	in Violation	Violations	Violations	in Violation	Violations	Violations	in Violation	
SWTR/ IESWTR				0	0	0	0	0	0	





EPA REGIO	V: 08				AC Rule		PRIMACY AGENCY: MT			
Surface Water	er Treatment Ru	ule/Interim E	Inhanced Surfac	ce Water Treati	ment Rule (SV	VTR/IESWTR)				
		# of	# of RTC	# of PWS						
Violation Type	Violation Name	Violations	Violations	in Violation						
31	Monitoring, Rout	tine/Repeat (S\		13	5	4				
36	Monitoring, Rout	tine/Repeat (S\	WTR-Filter)				59	18	11	
38	M&R Filter Turbi	idity Reporting		16	7	6				
41	Treatment Tech	nique (SWTR)		4	0	3				
42	Failure to Filter (	(SWTR)					11	0	10	
43	Treatment Tech	nique Exceeds	Turb 1 NTU				15	2	4	
44	Treatment Tech	nique Exceeds	Turb 0.3 NTU				15	0	2	
		MCLs			Monitoring		Treatment Technique			
	# of	# of RTC	# of PWS	# of	# of RTC	# of PWS	# of	# of RTC	# of PWS	
	Violations	Violations	in Violation	Violations	Violations	in Violation	Violations	Violations	in Violation	
SWTR/ IESWTR			45	2	16					





EPA RI	EGION: 08	AC Rule		PRIMACY	AGENCY: MT					
Coliforn	Coliforms (TCR)									
			# of	# of RTC	# of PWS					
Violation	n Type Violation Name		Violations	Violations	in Violation					
21	MCL, Acute (TCR)		8	1	8					
22	MCL, Monthly (TCR)		145	25	123					
23	Monitoring, Routine Major (TCR)		963	252	512					
25	Monitoring, Repeat Major (TCR)		35	2	32					
				_						

		MCLs			Monitoring		Treatment Technique			
	# of	# of RTC	# of PWS	# of	# of RTC	# of PWS	# of	# of RTC	# of PWS	
	Violations	Violations	in Violation	Violations	Violations	in Violation	Violations	Violations	in Violation	
TCR Totals	153	26	127	998	254	524				





EPA REGION: 08 State Summary PRIMACY AGENCY: MT

MCLs				Monitoring			Treatment Technique			Consumer Notification			
Rule	Chemical	# of	# of RTC	# of PWS	# of	# of RTC	# of PWS	# of	# of RTC	# of PWS	# of	# of RTC	# of PWS
Type	Sub-Group	Viols	Viols	in Viols	Viols	Viols	in Viols	Viols	Viols	in Viols	Viols	Viols	in Viols
CHEM	VOC	0	0	0	357	21	17						
CHEM	SOC	0	0	0	572	10	39						
CHEM	IOC	39	10	21	357	34	145						
CHEM	RAD	5	0	2	69	0	15						
CHEM	TOTAL	44	10	23	1355	65	179						
RULE	TCR	153	26	127	998	254	524						
RULE	SWTR				88	30	15	45	2	16			
RULE	LCR				572	106	382	12	6	12			
RULE	DBP	18	4	7	34	4	12	0	0	0			
RULE	CCR										157	95	123
RULE	PN										0	0	0
Grand T	otal	215	40	154	3047	459	917	57	8	28	157	95	123